

SOUTHWESTERN ILLINOIS RESOURCE CONSERVATION AND DEVELOPMENT, INC.
BOND, CLINTON, MADISON, MONROE, RANDOLPH, ST. CLAIR AND WASHINGTON
406 E. MAIN ST. MASCOUTAH, ILLINOIS 62258
(618) 566-4451 FAX (618) 566-4452
email: swircd@swircd.org
<http://www.swircd.org>

East St. Louis Lead Remediation

Preliminary Work Plan

Site Background and Existing Conditions

Southwestern Illinois RC&D, Inc. (SWI-RC&D) will implement a lead remediation project in East St. Louis, Illinois in Fall 2001 to assist in the redevelopment of a lead contaminated site. The process involved, in-place inactivation, is not designed to remove lead from the soil, however, it will tightly bond the metal to the soil particles so that it will be less of a threat to children and the environment.

The site involved is located on the south side of St. Clair Avenue, between 16th and 17th Streets in East St. Louis, Illinois. The site is located in a mixed residential and commercial area. An elementary school is located south of the site as well as a day care to the east.

A portion of the site is the former location of Western Forge Works, a metal forging business, and the remainder of the site is the location of former residences. All structures, with the exception of two billboards, have been removed. Currently, the site receives infrequent mowing, and is therefore devoid of woody material, however it is slightly overgrown with annual vegetation.

This site has been selected for its elevated levels of lead and its proximity to a school and day care center which make children vulnerable to coming in direct contact with the lead. The Illinois Department of Public Health originally investigated the site in 1999 and showed lead levels as high as 761 parts per million on site and slightly higher levels adjacent to residences along 16th Street. In 2001 the US EPA did further testing and identified several locations within the project site with levels in excess of 400 parts per million.

For purposes of this project, the term "site" will identify an area as defined in the attached site map.

Action Items

- 1) SWI-RC&D will create and disseminate an informational flyer to community groups and neighborhood residents prior to commencing any work.
- 2) SWI-RC&D will conduct a title search for each parcel within the project site.
- 3) SWI-RC&D will contact each owner to obtain authorization necessary to perform this project on their parcel.
- 4) SWI-RC&D will hire an independent contractor, hereinafter referred to as Contractor, to perform all work associated with the project site. A supervisor for this contractor will have successfully completed a certified 40-hour HAZWOPER training seminar.
- 5) A final Work Plan will be developed and reviewed by Kevin Turner, OSC, U.S. EPA prior to commencing any work on the project site.

Site - Work Plan

- 1) Contractor will encompass the entire site with a four-foot high orange construction fence, with one area gated to allow equipment access to the site. This gated section will be closed at all times when work crews are not on site. The fence will be supported by steel stakes placed on ten-foot centers along the perimeter of the fence line.
 - a) The fence will be in-place prior to beginning any work on the site.
 - b) The fence will be removed from the site once turf grass has become established (approximately three months following seeding).
- 2) Contractor will erect a four foot x six foot sign along St. Clair Avenue that will identify the project site. In addition, a second sign, two foot x three foot, will be placed between the site and elementary school to further bring awareness to the site and advise children to refrain from crossing the work area. SWI-RC&D will supply all signs.
- 3) Contractor will mow (brush hog) the entire site and identify areas of concern, such as roads in disrepair, concrete, etc. that will not be capable of being treated.
- 4) SWI-RC&D will advise Kevin Turner of same, and devise a specific plan of action regarding these areas.
- 5) Contractor will have a vehicle apply water to the site prior to disking to reduce dust.
- 6) Contractor will disk the entire site, in two directions, to a depth of six to twelve inches.
- 7) Contractor will apply Di-ammonium phosphate (DAP 11 52 0) to the site at a rate of 1.25 tons per acre. However, the northeastern section of the project site (area around billboards) will receive three times this amount to compensate for the increased lead levels in this area.

10) Contractor will apply compost, via a manure spreader, to the site at a rate of 100 dry tons per acre. This will equate to approximately 500 yards of compost per two-acres, or a layer three inches thick over the entire site.

11) Contractor will have a vehicle apply water to the site prior to disking to reduce dust.

12) Contractor will again disk the site, in two directions, to a depth of six to twelve inches.

13) Contractor will level site with the assistance of a weighted chain link, or similar, drag.

14) Contractor will seed the site with Kentucky 31 tall fescue. This should be applied at a rate of 425 pounds per acre.

15) Contractor will apply a starter fertilizer, via a drop or rotary spreader, at a rate of 150 pounds per acre.

16) Contractor will apply chopped straw to the entire site as needed.

17) Contractor will remove fence and signs from site once the turf grass has established, approximately three months following seeding.